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## DR. JOEL ASAPH ALLEN—AN APPRECIATION<sup>1</sup>

## BY E. W. NELSON

## [Plates 13-14]

With the passing of Dr. Joel Asaph Allen modern American science lost one of its foremost pioneer leaders. It was my privilege to know him for a period of more than 45 years. First when as a boy interested in birds in northern Illinois I secured there the first specimens of a sharp-tailed sparrow. Doctor Allen learned of this and at his request they were forwarded for his examination, with the result that he described the bird as a geographic form previously unknown to science. This was followed by his kindly encouragement and a personal interest in securing the publication of several of my first papers on birds, thus supplying some of the final factors which resulted in my decision to follow a scientific career. I believe that many other beginners were similarly helped through his direct intervention.

From the time of our early communications I regarded him as a personal friend, and in later years when we came into more direct contact we passed many enjoyable hours together, both in his office and while I was a guest in his home. In social intercourse his quiet geniality made him a delightful companion. The persistence of his work did not rob him of the power of seeing the humorous side of things nor of a quiet but lively appreciation of fun.

Another little-known phase of his experiences and character was uncovered when after knowing him for many years I accidentally learned that in the early days he had personally made large collections of big game in the West for the museum at Cambridge and that he had been more than an average good shot with a rifle; those collections including bison, elk, deer, antelope, and mountain sheep, with numerous smaller species. During one of my visits at his home I brought up the matter of these experiences and was deeply interested as he described many of the episodes in securing these specimens. His sparkling eyes and unusual animation showed that under his quiet demeanor he must have possessed much youthful enthusiasm.

Comparatively few men living now can appreciate the difficulties that beset the path of the young naturalist in the days when Doctor

<sup>1</sup> Presented at the dedication of the North American Mammal Hall in the American Museum of Natural History, to the memory of Doctor Allen, during the fourth annual meeting of the Society in New York, May 18, 1922. Allen began his work. The contrast between the conditions confronting the embryo naturalist then with the easy road of scientific research today may be likened in a material way with that between an old stage coach traversing a rough country road and the modern automobile on its cement highway.

In the early days of his career, from 1850 to the early seventies, fellow naturalists as well as scientific publications, scientific libraries, and collections, were exceedingly rare, and the young student in any branch of natural science was looked upon as following a pursuit of no importance or value to the community. Under such handicaps persistence in making natural science a life work meant the devotion of an enthusiast. We might paraphrase an old saying by stating that "A naturalist is born, not made," with full force in its application to a man like Doctor Allen, who at the age of 13 was irresistibly drawn to the path which he followed to the end of his life.

He was fortunate in having been born in eastern Massachusetts, where he eventually became one of that small group of men who studied under Agassiz and who afterwards became notable leaders in their various branches of science. He was also fortunate in having an opportunity as a young man to do field work under such varied conditions as those presented in New England, Brazil, Florida, the Mississippi Valley, and some of the Rocky Mountain States. This field experience was invaluable to him subsequently during his many continuous years of laboratory work. It broadened his knowledge of birds and mammals in life and their relationships to their environment, giving him a fund of invaluable facts which were most useful in his philosophical consideration of problems of evolution and of distribution.

Doctor Allen had a philosophical mind which looked into the meaning of the facts of Nature, and his ideas concerning evolution and the distribution of life in faunal areas were set forth in numerous papers. One of the earliest and most notable of these was his "Mammals and Winter Birds of East Florida." His writings exerted a marked influence among American naturalists in directing their attention to fascinating fields of investigation of broader scope than that of identifying species and recording technical characters.

He was one of the leaders in organizing the Nuttall Ornithological Club, at Cambridge, and later was one of the three men who issued the call to organize the American Ornithologists' Union, which was the child of the Nuttall Club. Through the enthusiasm aroused by this organization American ornithology developed with extraordinary rapidity and active research was instituted in a number of problems, in all of which Doctor Allen took a leading part. The work of the committee of the Ornithologists' Union on the conservation of bird life grew into such importance that it resulted in the birth of the National Association of Audubon Societies, of which Doctor Allen was one of the five organizers and in which he was an active director to the end. Among the other conservation work in which he took a prominent part was the formulation of the American Ornithologists' Union model bird law, which has been the foundation of much of the subsequent bird and game legislation in this country. This has been of incalculable value in conserving many forms of our wild life from extermination and was one of the elements leading to a practical activity in the conservation of wild life in the United States which is equaled nowhere else in the world.

Another committee of the Ornithologists' Union in which Doctor Allen took a part, that on the distribution and migration of North American birds, also outgrew the committee stage and became a division of the Department of Agriculture, later developing under the leadership of Dr. C. Hart Merriam into the Bureau of Biological Survey.

At the time the American Ornithologists' Union was organized zoölogical nomenclature was in a chaotic condition, which greatly increased the difficulties of scientific research. A committee on nomenclature was organized in which Doctor Allen's knowledge, clearness of vision and powers of logical reasoning made him a leading figure. This committee prepared the American Ornithologists' Union code of zoölogical nomenclature, which later became the basis of an international code, thus exerting world-wide influence on this phase of scientific research.

The early years of Doctor Allen's career were passed at what was then termed the Agassiz Museum but is now known as the Museum of Comparative Zoölogy, at Cambridge. In 1885 he became curator of birds and mammals in the American Museum of Natural History, where he had greater opportunities and his influence in the development of scientific research increased. For many years his attention had been devoted mainly to the study of birds, but during the last half of his life most of his time was given to mammals, in which he did notable work and held the same leadership that he had attained in ornithology.

At the time he came to the American Museum this new institution had practically no scientific study collections. Throughout the rest of his life he promoted many scientific expeditions to all parts of the world, and in addition encouraged the purchase of material, until the study collections of the Museum today are among the most notable in the world, containing more than 200,000 specimens of birds and mammals, and with the great collections in other branches of biology give this institution high rank as one of the increasingly great centers of scientific research.

One of the greatest and most unselfish of the many services done for American science by Doctor Allen was his editorship first of the Nuttall Bulletin and then of The Auk, the journal of the American Ornithologists' Union, which he continued for a period of 35 years. This editorship was notable for the painstaking character of the work, especially in the innumerable reviews of ornithological publications, which had much influence in encouraging and developing young ornithologists and in promoting the increase of ornithological research. In addition, he also served for many years as editor of the Bulletin and other publications of the American Museum, placing them on the high plane which they have always maintained.

Doctor Allen continued throughout his life to devote the major part of his time to scientific research in birds and mammals, the extent and variety of which are shown by a bibliography almost unequalled in length by that of any other American scientist. Among these were several magnificent monographs, of which special mention may be made of those on "The American Bisons," "The History of North American Pinnipeds," and that on the musk oxen, which were masterly contributions to knowledge.

The early influence of Doctor Allen, and the small group of contemporary leaders with him, developed an appreciation of the meaning of geographic variation and its effect on the fauna and faunal relationship beyond anything of the kind previously known. Eventually the influence of this work spread and has profoundly affected the methods of scientific study of zoölogy both in America and in other parts of the world.

No account of Doctor Allen's career should omit reference to the extraordinary persistence and industry which continued throughout his life. He had a frail physique and suffered the serious handicap of more or less persistent ill health, and at intervals had physical breakdowns which threatened to end his career. He had within, however, the marvelous fire of a great spirit which ignored weakness of the flesh and steadfastly carried on his work under conditions which to many would have appeared impossible. He early learned to conserve his strength and for many years devoted himself steadily to office and laboratory work, living an exceedingly simple life with almost no exercise beyond that had in his daily trips to and from his office. His friends often marveled at his being able to maintain himself in working condition under this routine, particularly when it was known that he was keeping persistently at his task of editing and writing, not only during office hours but evenings and Sundays, taking little or no recreation and pursuing this course year after year. Even then the extraordinary amount of his scientific output was made possible only by his ability to prepare his manuscript practically ready for publication in the first draft, the years of training in writing reviews and doing other editorial work undoubtedly having developed this most enviable facility.

For many years Doctor Allen's career served as a great stimulus to young naturalists throughout the country. His clearness of insight and mental powers were backed with a strong will, which quickly impressed all who came in close contact with him. Among American scientific men few have been held in such general esteem and have been able to so influence their contemporaries and the development of the sciences in which they worked. His loss will long be felt not only among those who had the privilege of knowing him personally but by many workers who paid him the tribute of admiration and respect as a great scientific leader.

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